Maryville Middle School is located in the South part of town in Maryville, Missouri. It is in an appropriate neighborhood for a school to be located. The middle school in Maryville consists of fifth through eighth grade. Each grade has its own pod area in the school and the school has two levels. The 5\textsuperscript{th} and 8\textsuperscript{th} grade are on the main level of the school. This level also holds the gym, lunchroom/commons area, office, and library. The 6\textsuperscript{th} and 7\textsuperscript{th} grade pod areas are located on the second floor. Each grade has five main core classes that include Math, Science, Social Studies, English, and Reading. Students also have their exploratory classes like Computers/Keyboarding, Art, Music, Physical Education, Discovery, Family and Consumer Science, and Band. Major characteristics of the school that impact instructional planning, delivery, and assessment include the planning periods teachers have set aside throughout the day already built into their schedules. Teachers have a team planning period set into their schedules, and they are also given a personal planning period for their own class to focus on. Also, the school schedule allows an appropriate amount of time during each class period for teachers to deliver information and teach lessons, as well as assess students in that allotted time. Scheduling affects learning and teaching because students have 40 minutes for each class period of computers and they do not have a bell system, so students are dismissed by the teacher. The reason for not having a bell system is because of the four different grade levels and they are all on different schedules, so having bells would be all too confusing.

Other characteristics of the school that impact teacher instruction and learning objectives for students to meet include some of the specifics about students in the school and
how they learn. For example, there are 97 total fifth graders at MMS consisting of 51 boys and 46 girls. There are 98 sixth graders, 100 seventh graders, and 126 eighth graders. This comes to a total of 421 students in the entire school—227 boys and 194 girls. Some of the ethnicities in the school reflect on the ethnicities in the Maryville community as well. For example, there are only three African American students in the entire school. This is similar to the small number of African American people in the community. There are 401 students out of the total 421 students in the whole school who are white/Caucasian. This is similar to the community of Maryville, as a majority of the population in the rural town is white. The rest of the different ethnicities in the school come out to four total Hispanic students, nine Asian students, and four Indian students in the entire school. Other factors besides different ethnicities and cultures in the school that have an effect on student learning include student learning levels and socioeconomic backgrounds. For example, there are 59 total students in the middle school on IEP’s and 140 total students that have free and reduced lunches. Of those totals, 16 fifth graders are on IEP’s and 29 fifth graders have free and reduced lunches. In my fifth grade keyboarding class specifically, there are 10 boys and 11 girls. There is one female student on an IEP, six students who have free and reduced lunches, five students who have split families, and one student who has been in foster care. All of these factors play a role in the way I will manage the computers classroom, develop and deliver learning objectives for students to achieve, and how I will select my teaching strategies and ways of instruction.

Fifth grade students are assessed in the computers classroom by weekly speed tests on their typing skills and the words per minute they are typing, and they are also assessed by individual assignments and tests for each unit. Some example units covered in fifth grade
computers are parts of the computer, input/output devices, internet safety, and then they touch a little bit on Microsoft Word, Power Point, and Microsoft Excel.

The classroom environment in which I am teaching the instructional sequence is very accommodating for delivering material to students and for assessing student progress. The room is easy to move around in, and students are seated in pods or rows in the computer room at MMS. Social dynamics and grouping patterns in the classroom are organized so that students have their own work space, but they can also work easily in groups because they are in a pod of four or six computers, or in a row of four or six computers. They don't do a whole lot of group work in computers class, but there are a few group projects and the set up in the classroom makes it more accessible for students to do group work.

The classroom rules and routines are very basic and easy to follow which makes it easier on students and on the teacher. Students have a basic set of about five rules to follow: Raise your hand to speak, be respectful of yourself and of others around you, keep your hands to yourself and on your own computer in the classroom unless otherwise instructed, come to class prepared and ready to learn, and have a positive attitude. This factor impacts teaching and learning because if you have a good set of classroom rules, your classroom is more likely to be successful. Physical arrangements in the classroom, as mentioned previously, are very accommodating for student needs and teacher needs. Maryville Middle School’s management plan for the school and for most of the classrooms in the school, including the computers classroom, is very similar to that of several different classroom management theorists. For example, the classroom management plan for my cooperating teacher’s room is similar to that of William Glasser’s approach on classroom management because his ideas involve giving
Middle School Teacher Work Sample

students choices and helping them make the right choice. This can be done by giving students pre-determined options that the teacher would be satisfied with any choice the student might choose. The classroom management plan at MMS can also be related to the Dreikurs Model that includes teachers should always strive to encourage student efforts, teach students that unpleasant consequences will always follow inappropriate behavior, and establish order and limits in the classroom. Love and logic and Kagan Cooperative Learning are also used at MMS and in the computers classroom for all students—including IEP students. Accommodations and modifications are made for IEP students and all teachers communicate and collaborate about those accommodations and modifications that need to be made for those students. For example, a fifth grade student who is on an IEP was allowed to set a website as a “favorite” on her task bar that is used every day in class so that she can get to it more easily. Love and logic is used to help students make good choices on their own and Kagan Cooperative Learning is used to allow students different methods of learning and to allow students to participate in more group work activities to teach and learn with one another.

Technology in the computers classroom at Maryville Middle School is used as an instructional tool quite often and a wide variety of pieces of technology are used. Some of the pieces of technology equipment used in my cooperating teacher’s classroom include a wireless keyboard, a wireless mouse, an overhead projector, a document camera, clickers, flip cameras, and more. This impacts teaching and learning because by using the wireless technologies, the teacher is not stuck behind the desk because she is able to move around the room while using it, and students can also use the mouse and keyboard during instruction because it can be passed around the room. The document camera allows for the teacher to go from showing
something in hard copy to the class (without having to have a transparency) to switching to the computer to display something for the class to see on the projector screen.

The computer classes at MMS range anywhere from 7-21 students per class. Each class is separated by grade level, all students in all grades (5th-8th) have computers for one quarter of the school year each year. Every class is different. In the fifth grade class this quarter, there are ten boys and eleven girls. The boy to girl ratio differs in every class. There are also noticeable differences in cultures and socioeconomic backgrounds of students in the school and in the fifth grade keyboarding class. This impacts teaching and learning because there is a difference in the students who come from supportive families and have positive attitudes, and those who you can tell do not come from a good socioeconomic background or who are not given support at home. A lot of the effort that students put in comes from their life at home and how they are raised. There is a wide range of abilities in the fifth grade class and there are also some students with special needs. The class is structured so that students can work at their own pace, and at a challenging level for them individually. For example, the students use the Type To Learn program to focus on the keyboarding aspects of the class, and each student’s account on Type To Learn can be altered or adjusted depending on learning levels and abilities of students. Students with special needs are given alternate assignments or are given accommodations and modifications for assignments that the rest of the class is completing. Also, most of these students with special needs are on I.E.P’s in which are used to accommodate or modify assignments. The learning context will impact my planning objectives because I will focus on using the school, community, and specific student characteristics such as socioeconomic backgrounds of students, cultural differences, and learning disabilities to help
me know how to best reach my students in helping them learn. For example, I will make accommodations and modifications for assignments for my student on an IEP such as bookmarking websites, changing her levels of difficulty on Type To Learn, reducing her words per minute goal on her speed tests, and more.

The learning context will affect my management, instruction and assessment in order to meet the needs of all learners in my classroom because it is a way to reflect and evaluate all the important aspects of the school and classroom in order for the teaching and learning process to be successful. Reflecting on the school and community, classroom environment, and student needs really helps me to be aware of how I can improve my teaching techniques and styles to best accommodate my learners.

Having a diverse class affects how you will manage, instruct, and assess your class, and most classes are very diverse because each student is different and unique in their own way. Diversity affects planning, assessment, and instruction because having diversity in the classroom gives the teacher the opportunity to provide instruction for all types of learners. By giving pre and post assessments, it will be easier to determine what students know and learn and what needs to be changed, added, or removed from instruction to help students learn. Having diversity in planning mixes things up and makes it more interesting and enjoyable for the teacher and for students. Lastly, having diversity in assessment allows for students to gain experience for different types of assessment so that they do not get used to having things done one way and are able to be assessed in different ways.
### Middle School Teacher Work Sample

#### TWS Element 2

**5th grade Keyboarding I**  
**Unit: Computer Basics**

<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>NBEA standards/description</th>
<th>List of appropriate instructional strategy/assessment</th>
<th>List of appropriate technology to improve learning</th>
</tr>
</thead>
</table>
| 1. The learner will be able to identify parts of the computer with a minimum score of 50/60 on the virtual assessment. | Explain computer processes of basic computer operations, hardware and software.  
IT.III.1.1 | Teacher lecture, independent computer work for each student (labeling diagram on computer screen) | Computer for each student, projector for entire class to see, document camera |
| 2. The learner will be able to determine if a device is an input, output, or storage device with 90% accuracy on advanced organizer and computer basics post-test. (Questions 11, 19, 20, 21, 22, & 23) | Explain computer processes of basic computer operations, hardware and software.  
IT.IV.1 | Advanced organizer (web) completed as whole class, individual picture worksheet, think-pair-share, Edmodo responses, teacher lecture with Prezi presentation | Computer devices, computer, Prezi presentation, projector, document camera, Edmodo (posted responses on class Web Site) |
| 3. The learner will be able to determine if a device is an internal or external device with 100% accuracy on computer basics post-test. (Question 25) | Explain computer processes of basic computer operations, hardware and software.  
IT.III.1.1  
IT.II.1-2.1  
IT.II.3-4.6  
IT.V.1.3  
IT.V.2.4 | Advanced organizer (web) completed as whole class, think-pair-share, Edmodo responses, teacher lecture with Prezi presentation | Computer devices, computer, Prezi presentation, projector, document camera |
<p>| 4. The learner will exhibit a basic understanding of operating systems, the desktop, and | Explain computer processes of basic computer operations, hardware and software. | Prezi presentation given to class, class discussion, teacher lecture | Computer, projector, Prezi presentation |</p>
<table>
<thead>
<tr>
<th>Menu with 80% accuracy on computer basics post-test and in class discussion. (Questions 5, 12, 13)</th>
<th>IT.III.1.1</th>
<th>Explode computer processes of basic computer operations, hardware and software. IT.III.1.1 IT.II.1-2.1 IT.II.3-4.6</th>
<th>Prezi presentation, individual picture worksheet, class discussion, think-pair-share</th>
<th>Computer, projector, Prezi presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. The learner will put gigabyte, megabyte, and kilobyte in order of smallest to largest with 100% accuracy on worksheet and computer basics post-test. (Questions 1 and 24)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The learner will be able to differentiate between hardware and software devices with 100% accuracy on Computer basics post-test. (Question 9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Questions 4 and 17 were mastered on the pre-test, and will therefore not be taught in instruction throughout the unit. Questions 2, 3, 10, 14, 15, 16, & 18 were given on pre-test to check for knowledge and will not be given on the post-test because they will be covered in the following unit.*

**Reflection on connection between Learning Objectives and Instructional Strategies**
The first objective is linked with the instructional strategy of teacher lecture and independent computer work because for this objective to be measured, students need to work independently in labeling the computer for the teacher to assess their knowledge on the content in the objective. The second objective is linked with the strategies of using an advanced organizer (idea web) completed as whole class, individual picture worksheet with labeling, think-pair-share, and Edmodo responses because this objective needs to be met by all students and can be difficult to master. Because it can be difficult to master, material needs to be taught in a variety of ways to meet the needs of all students—paper/pencil form, class discussion, partner discussion, delivered through technology, etc. The third objective is also linked with a variety of instructional strategies such as using the advanced organizer (web) completed as
whole class that contains Internal/External and Input/Output devices, think-pair-share activity with the Online Stopwatch to keep track of time, Edmodo responses, and teacher lecture with Prezi presentation. All of these are needed because this objective again needs to be delivered to students in a variety of ways to meet the needs of all students to get them to understand the content. Objective number four was not so important that students master, but just so that they have an idea of the concepts. That is why the material for this objective was only linked with the instructional strategies of the Prezi presentation given to the entire class, class discussion, and teacher lecture. Objective number five was linked with the instructional strategies of being delivered through the Prezi presentation, individual picture worksheet with labeling, and class discussion because it is an objective that needs to be repeatedly brought up to students so that they are able to achieve mastering the objective. Lastly, objective six was linked with many of the same instructional strategies as other objectives because this objective is really what all the other objectives are based off of—so objective six is one of the building blocks to other objectives and can be taught by using any of the previous instructional strategies and is helpful to students when brought up when discussing all other objectives in this unit.

Reflection on connection between Learning Objectives and Assessments
A variety of formative and summative assessments are used to assess all six of these learning objectives. The first assessment used to measure the first objective was a simple formative assessment of teacher observation and keeping a data record for student achievement. Other formative assessments used for the rest of the objectives included teacher observation and participation points for Edmodo review assignments where students would have assignments posted to the class website that would take 5-10 minutes to complete as review of material and objectives from previous class periods. This is a useful assessment because it is easy for the teacher to get feedback on student comprehension by getting immediate results of student answers on assignments and being able to communicate with students about their responses. Another informal assessment is my use of an advanced organizer (web) that I informally evaluate student responses. I also used a formative assessment used is class discussion and think-pair-share, where students are being assessed on discussion with peers as well as participating in the whole-class discussion. This gives the teacher an idea of what students know and understand. A summative assessment will be given at the end of the unit via Edmodo and there will be true/false, multiple choice, and short answer questions given on the 20-question independent assessment. This will allow the teacher to get immediate feedback on student results and data on each question and how each student did on each question.
A gigabyte (GB) is smaller than a megabyte (MB).

- True
- False

The Internet is located on one central government computer.

- True
- False

Harassing someone in a chat room, IM or e-mail, is the same as bullying them to their face.

- True
- False

Opening someone else's files and folders on a computer without their permission is like breaking into their locker and stealing their trapper.

- True
- False

The desktop is

- the screen in front of you without any applications running.
- an open program.
A right click on the mouse will
- select a text
- move text
- open a menu
- A & B

What is the front part of a monitor where information is displayed?
- scanner
- computer
- memory
- screen

Pushing a button on the mouse is called
- clicking
- clacking
- mousing
- phishing

All of these are hardware except
- mouse
- Microsoft Windows
- scanner
- printer
Question Prompt: 10
Total Points: 1
Which is not a type of malicious code?
- virus
- trojan horse
- DOS
- spam

Question Prompt: 11
Total Points: 1
All of the following are input devices except
- Disk Drive
- microphone
- mouse
- speaker

Question Prompt: 12
Total Points: 1
The "Start Menu"
- turns on the computer.
- contains links to files and programs on your computer.
- ideas for completing the project.
- helps you start designing menus.

Question Prompt: 13
Total Points: 1
The _____________ is usually the first page that visitors see when they visit a site. In most cases, it's called "default" or "index."
- Home Page
- Main Page
- Default Page
- Index Page
Question Prompt: 14
Total Points: 1
When working on a computer, it is important to
- use the internet all the time.
- take a break and have a snack.
- save your work frequently.
- cross your feet.

Question Prompt: 15
Total Points: 1
As I spend time online, I should never
- take a break and have a snack.
- use the internet to help me with homework.
- agree to meet someone in person who I have met online.
- talk to new people

Question Prompt: 16
Total Points: 1
What does "WWW" stand for?
- world wide west
- when, what, where
- world wild web
- world wide web

Question Prompt: 17
Total Points: 1
If you want to type in all capital letters but don't want to hold down the shift key, you can
- press the Tab key.
- press the Caps Lock key.
- press the Enter key.
- Press the Alt key.

Question Prompt: 18
Total Points: 1
When you are finished using a computer, you should always
- shut it down.
- log off.
- unplug it.
- clean it.

Question Prompt: 19
Total Points: 1

A disk drive is a device used to input, store and retrieve information for a computer.
- True
- False

Question Prompt: 20
Total Points: 1

A drive can be an input, output, and a storage device.
- True
- False

Question Prompt: 21
Total Points: 1

Writable (CD-R) and Re-writable (CD-RW) CD’s, DVD’s, and Flash Drives are all examples of internal storage devices.
- True
- False

Question Prompt: 22
Total Points: 1

All of the following are output devices except
- mouse
- monitor
- printer
- speaker

Question Prompt: 23
Total Points: 1
Printers and monitors are examples of output devices.

- True
- False

Question Prompt: 24
Total Points: 1

A kilobyte (KB) is larger than a megabyte (MB).

- True
- False

Question Prompt: 25
Total Points: 1

A computer's hard drive and RAM are examples of internal storage devices.

- True
- False

Pre-test Results in New Objectives and Rationale for Changing
Based on the pre-test results of students, the only questions I decided not to include and put an objective in for in this unit are mentioned above with the (*) symbol under the table: Questions 4 and 17 were mastered on the pre-test, and will therefore not be taught in instruction throughout the unit. Questions 2, 3, 10, 14, 15, 16, & 18 were given on pre-test to check for knowledge and will not be given on the post-test because they will be covered in a following unit. I decided this after interpreting that pre-test results and decided that the six other objectives had more in common with one another and were more relatable to one another—more so than the questions listed above. They also take more time to master, so I felt that I needed to spend the time working with students on really understanding the basics that are included in these objectives. The questions above will be developed into objectives in a unit on Internet safety.

Some examples of student work from formative assessments:
Review assignment on Edmodo-- Name one INTERNAL computer device and one EXTERNAL computer device. Then tell me if the EXTERNAL device is an input or an output device and why. Please use complete sentences.

Student 1 response (IEP student): A internal device is the hard drive. It is in the computer so it is a input.

Student 2 response (grade level learner): Speakers is an external device and the C Drive is an input device. A c drive is inside a computer and you can put the speakers outside of your computer.
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Student 3 response (high level learner): One internal computer device is a disk drive. One external device is a speaker because speakers put out sound.

Student scores on pre-test out of 25 questions (1 pt. per question):
13, 15, 18, 21, 14, 14, 17, 17, 19, 16, 16, 17, 15, 14, 17, 20, 16, 16, 20, 12, 18

**HIGHEST score**: 21  
**AVERAGE score**: 16.4 (about 16)  
**LOWEST score**: 12

*Unable to show student samples of the actual pre-test with questions answered because the pre-test was given electronically through Edmodo.com (the class website) and there is no option to view entire student pre-test (only an option to look at each question individually and percentage of each question answered correctly by students).
<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>Assessment Methods</th>
<th>Standard of Performance/Expectation</th>
<th>Rationale</th>
<th>Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner will be able to identify parts of the computer with a minimum score of 50/60 on the virtual assessment and Computer Basics Post Test (Questions 4 and 10)</td>
<td><strong>Formative assessment:</strong> Observation and record of each student’s score after doing an activity in which the students virtually labeled the parts of the computer. <strong>Summative assessment:</strong> Computer Basics Post Test</td>
<td>I expect each student to achieve a minimum score of 50/60 on the virtual computer labeling assessment to demonstrate he/she has met the objective and to correctly answer at least one out of the two questions on the post test.</td>
<td>I chose this assessment for this objective because it was an efficient way to observe student knowledge and to give insight on what still needed to be taught. I will administer, score, and interpret this assessment by having each student individually complete the virtual assessment on the computer, walk around the room and record the scores when they finish with the assessment, and observe scores to decide what still needs to be taught. The post test will also be administered and scored individually. The test will be given on Edmodo and will be scored electronically and by me.</td>
<td>I have one student in my classroom who is on an IEP for focus and attention. Some adaptations and modifications I made for her for this particular assessment were that she only needed to achieve a 40/60 on the virtual labeling assessment.</td>
</tr>
</tbody>
</table>

The learner

**Formative**

**I expect each student to**

**I chose these**

**I have one**
will be able to determine if a device is an input, output, or storage device with 90% accuracy on advanced organizer and computer basics post-test. (Questions 5, 6, 9, 12, 13, 15, 16, 19)

**Assessment:**
Kagan’s “Numbered Heads Together” review game where students had to clarify if devices were input, output, or storage devices.

**Formative Assessment:**
Advanced organizer for hardware devices—internal/external and input/output.

**Formative Assessment:**
Respond to post in one or two sentences on Edmodo.

**Summative Assessment:**
Computer Basics Post Test.

equally participate in the review game and complete the advanced organizer and Edmodo post to demonstrate he/she has met the objective and to correctly answer at least six out of the eight questions on the post test.

**Assessments for this objective** because they are efficient ways to engage 100% of students and to see each student’s knowledge on the material. I will administer, score, and interpret these assessments by grouping students in teams of 4 or 5 and assign each student in each group a color. When their color is called, they are the representative to speak for the group during that round of the review game. I will also have each student individually complete advanced organizer and go over it with the class, have students individually respond to the post in Edmodo, and observe what was said in the posts to determine what still needs to be taught. The post student in my classroom who is on an IEP for focus and attention. Some adaptations and modifications I made for her for this particular assessment were having certain items already labeled for her on the advanced organizer, and only having to answer 5 out of the 8 questions correctly on the post test.
| The learner will be able to determine if a device is an internal or external device with 100% accuracy on computer basics post-test. (Questions 7, 8, 14, & 18) | **Formative assessment:** Kagan’s “Numbered Heads Together” review game where students had to clarify if devices were input, output, or storage devices.  
**Formative assessment:** Advanced organizer for hardware devices—internal/external and input/output.  
**Formative assessment:** Respond to post in one or two sentences on Edmodo.  
**Summative assessment:** Computer Basics Post Test. | I expect each student to equally participate in the review game and complete the advanced organizer and Edmodo post to demonstrate he/she has met the objective and to correctly answer at least three out of the four questions on the post test. | I chose these assessments for this objective because they are efficient ways to engage 100% of students and to see each student’s knowledge on the material. I will administer, score, and interpret these assessments by grouping students in teams of 4 or 5 and assign each student in each group a color. When their color is called, they are the representative to speak for the group during that round of the review game. I will also have each student individually complete advanced organizer and go over it with the class, have | I have one student in my classroom who is on an IEP for focus and attention. Some adaptations and modifications I made for her for this particular assessment were having certain items already labeled for her on the advanced organizer, and only having to answer two out of the four questions on the post test correctly. |
| The learner will exhibit a basic understanding of the desktop, and menus with 80% accuracy on computer basics post-test and in class discussion. (Questions 1, 2, 20) | **Formative assessment:** Kagan’s “Numbered Heads Together” review game. **Summative assessment:** Computer Basics Post Test | I expect each student to equally participate in the review game to demonstrate he/she has met the objective and to correctly answer at least two out of the three questions on the post test. | I chose this assessment for this objective because it is an efficient way to engage 100% of students and to see each student's knowledge on the material. I will administer, score, and interpret this assessment by grouping students in teams of 4 or 5 and assign each student in each group a color. When their color is called, they are the representative to speak for the group during that round of the assessment. | I have one student in my classroom who is on an IEP for focus and attention. Some adaptations and modifications I made for her for this particular assessment were to only have to answer one out of the three questions on the post test correctly. |
The learner will put gigabyte, megabyte, and kilobyte in order of smallest to largest with 100% accuracy on worksheet and computer basics post-test. (Questions 3 and 17)

<table>
<thead>
<tr>
<th>Formative assessment:</th>
<th>I expect each student to complete the storage devices worksheet and to demonstrate he/she has met the objective and to correctly answer at least one out of the two questions on the post test.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage devices</td>
<td>I chose this assessment because I thought it would be helpful to students to see actual images so they could have a picture in their head when thinking of terms and devices. This will be administered during a Prezi presentation and students will be filling out the worksheet during the lecture and can then use the sheet as a review for the post test. The worksheet will be scored based on participation—they get credit if they did the work. The post test will also be given as an assessment to test student knowledge</td>
</tr>
<tr>
<td>Summative assessment:</td>
<td></td>
</tr>
<tr>
<td>Computer Basics</td>
<td>I have one student in my classroom who is on an IEP for focus and attention. Some adaptations and modifications I made for her for this particular assessment were giving her storage devices worksheet in color to grasp her attention.</td>
</tr>
<tr>
<td>The learner will be able to differentiate between hardware and software devices with 100% accuracy on Computer basics post-test. (Question 11)</td>
<td><strong>Formative assessment:</strong> Teacher observation. <strong>Summative assessment:</strong> Computer Basics Post Test</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th></th>
<th></th>
<th>evaluate student knowledge on the material.</th>
<th></th>
</tr>
</thead>
</table>


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Copy of student assessment—advanced organizer below.

Answer key for advanced organizer:

**TOPIC: Hardware**

<table>
<thead>
<tr>
<th>INTERNAL</th>
<th>EXTERNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Hard Drive</td>
<td>- Mouse</td>
</tr>
<tr>
<td>- CD ROM</td>
<td>- Keyboard</td>
</tr>
<tr>
<td>- RAM</td>
<td>- Speakers</td>
</tr>
<tr>
<td></td>
<td>- Printer</td>
</tr>
<tr>
<td></td>
<td>- Scanner</td>
</tr>
<tr>
<td></td>
<td>- Monitor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INPUT</th>
<th>OUTPUT</th>
<th>BOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mouse</td>
<td>- Speakers</td>
<td>- Printer/Scanner</td>
</tr>
<tr>
<td>- Keyboard</td>
<td>- Monitor</td>
<td></td>
</tr>
<tr>
<td>- Scanner</td>
<td>- Printer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CLUSTER WORD WEB write your topic and add details in the smaller circles

TOPIC:

Name: 

Date: 
Label the images from the Prezi!

Name: __________________________
Label these data capacity measurements and give an example of each:

Kilobyte: ______   Example: _______________
Megabyte: ______   Example: _______________
Gigabyte: ______   Example: _______________

ANSWER KEY for Storage Devices worksheet:

Name: _______________________

Label the images from the Prezi!
USB Stick  CD-R  CD-RW

DVD  The Cloud  Hard Drive
Label these data capacity measurements and give an example of each:

Kilobyte: __KB__  Example: Clip Art Image
Megabyte: __MB__  Example: MP3 Song
Gigabyte: __GB__  Example: Blockbuster DVD
Student copy of the post assessment:

Computer Basics Post Test

Question Prompt: 1
Total Points: 1

The desktop is...
- an open program
- the screen in front of you without any applications running
- where your computer is sitting
- everything on the screen

Question Prompt: 2
Total Points: 1

A right click on the mouse will...
- move text
- select text
- A&B
- open a menu

Question Prompt: 3
Total Points: 1

What has the greatest capacity?
- gigabyte (GB)
- megabyte (MB)
kilobyte (KB)

Question Prompt: 4
Total Points: 1

Pushing a button on the mouse is called...

- clacking
- clicking
- mousing
- phishing

Question Prompt: 5
Total Points: 1

Name one input device and tell why it is an input device.

Question Prompt: 6
Total Points: 1

Name one output device and tell why it is an output device.

Question Prompt: 7
Total Points: 1

Name one internal device and tell why it is an internal device.

Question Prompt: 8
Total Points: 1

Name one external device and tell why it is an external device.

Question Prompt: 9
Total Points: 1
Name one storage device and tell why it is a storage device.

Question Prompt: 10
Total Points: 1

What is the front part of the monitor where information is displayed?

- scanner
- computer
- screen

Question Prompt: 11
Total Points: 1

Which of these is NOT an example of hardware?

- mouse
- Microsoft Word
- printer
- keyboard

Question Prompt: 12
Total Points: 1

Which of these is NOT an input device?

- Disk Drive
- Microphone
- mouse
- speaker
Question Prompt: 13
Total Points: 1

A disk drive is a device used to input, store, and retrieve information for a computer.

- True
- False

Question Prompt: 14
Total Points: 1

Writable (CD-R) and Re-writable (CD-RW) CD’s, DVD’s, and Flash Drives are all examples of INTERNAL storage devices.

- True
- False

Question Prompt: 15
Total Points: 1

A drive can be an input, output, and storage device.

- True
- False

Question Prompt: 16
Total Points: 1

A printer is ONLY a...

- input device
- storage device
- internal device
- output device
Question Prompt: 17
Total Points: 1

A kilobyte (KB) is LARGER than a megabyte (MB).
- True
- False

Question Prompt: 18
Total Points: 1

A computer's hard drive is an example of an internal storage device.
- True
- False

Question Prompt: 19
Total Points: 1

A scanner is ONLY a...
- input device
- storage device
- internal device
- piece of software

Question Prompt: 20
Total Points: 1

When finished using a computer, you must always remember to...
- put it to sleep
- log off
Answer key to Post Test:

Computer Basics Post Test

Question Prompt: 1
Total Points: 1

The desktop is...
- an open program
- **the screen in front of you without any applications running**
- where your computer is sitting
- everything on the screen

Question Prompt: 2
Total Points: 1

A right click on the mouse will...
- move text
- select text
- A&B
- **open a menu**

Question Prompt: 3
Total Points: 1

What has the greatest capacity?
Pushing a button on the mouse is called...

- clacking
- **clicking**
- mousing
- phishing

Name one input device and tell why it is an input device.

**Example answer:** A mouse is an input device because you use it to click and give information to the computer.

Name one output device and tell why it is an output device.

**Example answer:** A speaker is an output device because it gives out sound.

Name one internal device and tell why it is an internal device.
Example answer: A hard drive is an internal device because it is inside the computer and you can't see it.

Question Prompt: 8
Total Points: 1

Name one external device and tell why it is an external device.

Example answer: A keyboard is an external device because it is outside of the computer and you can touch it and see it.

Question Prompt: 9
Total Points: 1

Name one storage device and tell why it is a storage device.

A USB stick is a storage device because you can save information from the computer on it.

Question Prompt: 10
Total Points: 1

What is the front part of the monitor where information is displayed?

- scanner
- computer
- **screen**

Question Prompt: 11
Total Points: 1

Which of these is NOT an example of hardware?

- mouse
- [**Microsoft Word**](#)
- printer
keyboard

Question Prompt: 12
Total Points: 1

Which of these is NOT an input device?

- **Disk Drive**
- **Microphone**
- **mouse**
- **speaker**

Question Prompt: 13
Total Points: 1

A disk drive is a device used to input, store, and retrieve information for a computer.

- **True**
- **False**

Question Prompt: 14
Total Points: 1

Writable (CD-R) and Re-writable (CD-RW) CD's, DVD's, and Flash Drives are all examples of INTERNAL storage devices.

- **True**
- **False**

Question Prompt: 15
Total Points: 1

A drive can be an input, output, and storage device.

- **True**
A printer is ONLY a...

- input device
- storage device
- internal device
- **output device**

A kilobyte (KB) is **LARGER** than a megabyte (MB).

- True
- **False**

A computer's hard drive is an example of an internal storage device.

- True
- False

A scanner is ONLY a...

- input device
When finished using a computer, you must always remember to...

- put it to sleep
- log off
- clean it
- unplug it

REFLECTION:

My chosen assessments for this unit match the instructional strategies I will employ in teaching this unit because I plan on using a variety of instructional strategies, just as I will use a variety of assessments. I want to use a variety of assessments and instructional strategies because not all learners learn in the same way, and I know that it is so important to meet the needs of all students. By having a variety of instructional methods and assessments, students will be more engaged and not bored with the same boring thing every day. Students will be assessed on different criteria which will allow them more opportunities to succeed and show their knowledge of the material. Assessments will be related to instructional strategies to assure that students are being assessed on the material being taught.
<table>
<thead>
<tr>
<th>Lesson Plan</th>
<th>Modifications</th>
</tr>
</thead>
</table>
| **Teacher/School:** Emily Hoffman/ Maryville Middle School (5th grade)  
**Title:** Computer Systems |  
**Accommodations/Adaptations** |
| **Time Allotted for Lesson:** 20 min (first 20 minutes of class are dedicated to the keyboarding portion of the class—Type to Learn program and typing warm-ups) |  
Materials that have been adapted/for whom? |
| **Materials Needed:** Computer for each student, document camera, Graphic Organizer hand-out, pen or pencil |  
Computer adaptations made for a student who has difficulty focusing and learns at a slower pace—commonly used web pages were “favorite” to make it more accessible to the student and the student sits close to the teacher station. |
| **Standards:**  
1. Explain computer processes of basic computer operations, hardware and software. |  
Who is this Modified Objective for? |
| **Lesson Objective(s):**  
The learner will be able to list 2 internal computer devices, 2 external computer devices, and 2 input and 2 output devices on the graphic organizer hand-out with 95% accuracy. |  
The modified objective is for a student who has trouble focusing and learns at a slow pace. |
| **Modified objective:**  
The learner will be able to list 1 internal computer device, 1 external computer device, and 1 input and 1 output device on the graphic organizer hand-out with 90% accuracy. |  
<p>|</p>
<table>
<thead>
<tr>
<th>Lesson Objective(s) Rationale: Why did you choose this/these objective(s) for your students?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This objective is necessary for students to know because it is the basic foundation to the building blocks of computer systems and basic information they will need to know to work further with technology/computers or technology/computers classes.</td>
</tr>
<tr>
<td>2. This objective is necessary for students to be able to differentiate between two parts to computer systems and to be able to organize them where they belong to practice categorization/organizational skills.</td>
</tr>
<tr>
<td>3. This objective is necessary for students to understand why parts of computers are used and how they are used to make computers work. This is especially important due to the fact that computers and technology are so much a part of our everyday lives—in the work force, school, and homes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment: what will you do to know if the students have gotten the objective(s)? Connect these to your Instructional strategies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative assessment—Teacher observation of student work.</td>
</tr>
<tr>
<td>Formative assessment—Teacher/whole class question/answer session</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Before the Lesson(anticipatory set):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will log on to their “Edmodo” accounts online where I will have posted an assignment to write one internal device they learned about in the previous class, and one external device, and then tell whether that external device is an input or an output device.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What accommodations have been made for special students assessments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions for the special student assessments are more guided questions.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>How much time will this take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This should take about 8-10 minutes</td>
</tr>
</tbody>
</table>
During the Lesson (Procedure):

**Instructional Input:**
List your Instructional Strategies that you are using
1. Technology—virtual instruction by having students post the assignment on their account under my class.
2. Whole class discussion
3. Class lecture
Continue input-
   Students will participate in independent work, and class discussion.

**Modeling:** (acknowledge any tech used here) and time it takes for this part of the lesson
I will model by filling out the graphic organizer with the class by using the document camera and projector to project the worksheet on the screen in the front of the room. I will model by going through each part of the graphic organizer and leading student discussion to place items in the graphic organizer. (10 minutes)
**Guided Practice** (don't forget to use a variety of forms of student expression: media, speaking, writing, listening, role-playing, etc.) how much time?

Students will speak, listen, and write during this time as they will participate in speaking with me and other classmates through discussion, listen to other classmates and myself, and write by typing on the computer and writing on their graphic organizer about the material. (10 minutes)

**Check for Understanding:** (Ask questions that force students to elaborate on information)

1. Teacher Observation (formative assessment)
I will ask questions that force students to elaborate on information by guiding their questions and allowing the appropriate wait time for student responses. I will observe their assignment submissions on their Edmodo accounts and give them participation points. I will also check...

**STUDENT EXPRESSION:**
* Speaking—Students will be speaking out loud in a class discussion.
* Listening—Students will listen to me speak to the class and listen to what other students have to say.
* Writing—Students will write on their own graphic organizer about the material covered in class.
to see that they filled out the graphic organizer as well for participation points and to check to see that they were accurate.

**Independent Practice:** (activity that forces students to draw conclusions from their learning); how much time?

The Edmodo assignment that was used as the anticipatory set what independent practice, as well as each student filling out their graphic organizer independently (15 minutes for both activities).

**Closure (summary):** preview- summarize-predict; and how much time will this take? Estimate time.
I will summarize what we went over during the lesson including the parts of the graphic organizer and information learned from the previous day in the Prezi presentation by asking students to share what they learned. (2-3 minutes)

**Follow-up activities:** (could be homework or other long range projects); estimated time
There were no follow-up activities for this lesson.

GRAPHIC ORGANIZER
USED FOR
HARDWARE DEVICES:

CLUSTER WORD WEB write your topic and add details in the smaller circles

TOPIC:

Name:  
Date:
| Teacher/School: Emily Hoffman/ Maryville Middle School (5th grade) |
|---|---|
| Title: Storage Devices |

| Time Allotted for Lesson: 20 min (first 20 minutes of class are dedicated to the keyboarding portion of the class—Type to Learn program and typing warm-ups) |

| Materials Needed: Computer, projector, document camera, Internet for the Prezi Presentation that will be given to the class beginning of Prezi attached to bottom of this lesson plan) and assignment sheet attached at the end of this lesson plan and pen or pencil for each student. |

<table>
<thead>
<tr>
<th>Standards:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Students will be able to recall specific storage devices.</td>
</tr>
<tr>
<td>3. Students will know the difference between Kilobyte, Megabyte, and Gigabyte.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lesson Objective(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The learner will be able to recall six different storage devices from the Prezi and label the images on their worksheet with 100% accuracy.</td>
</tr>
<tr>
<td>2. The learner will be able to correctly label kilobyte, megabyte, and gigabyte and give an example of each with 100% accuracy.</td>
</tr>
</tbody>
</table>

| Modified objective: |

<table>
<thead>
<tr>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodations/Adaptations</td>
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</tbody>
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<tr>
<th>Materials that have been adapted/for whom?</th>
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<tbody>
<tr>
<td>Computer adaptations made for a student who has difficulty focusing and learns at a slower pace—commonly used web pages were “favorite” to make it more accessible to the student and the student sits close to the teacher station.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who is this Modified Objective for?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The modified objective is for a student who has trouble focusing and learns at a slow pace.</td>
</tr>
</tbody>
</table>
The learner will be able to recall six different storage devices from the Prezi and label the images on their worksheet with 90% accuracy and correctly label kilobyte, megabyte, and gigabyte and give an example of each with 95% accuracy.

**Lesson Objective(s) Rationale:** *Why did you choose this/these objective(s) for your students?*

1. This objective is necessary for students to know because it is the basic foundation to the building blocks of capacity and space in using technology, and it is important for students to know with how often technology is used in today's world.

2. This objective is necessary for students to be able to use certain storage devices when working on computers for later years in their schooling and life to be able to save documents and other files.

3. This objective is necessary for students to understand how to use certain storage devices that are all commonly used in today's working world and to be able to read and correctly label capacity measures for those storage devices.

**Assessment:** *what will you do to know if the students have gotten the objective(s)? Connect these to your Instructional strategies.*

Formative assessment—Teacher observation of student work (worksheets)

Formative assessment—Teacher/whole class question/answer session

What accommodations have been made for special students assessments?

The student with special needs was given a worksheet where the pictures were printed in color to help her focus on the images.

How much time will this take?

This should take about 5-10 minutes
Before the Lesson (anticipatory set):
I will begin the class by asking students a prompting question—what they think of when they hear the term, “storage device” and to tell me about some possible storage devices. This discussion will then lead into the Prezi presentation about storage devices.

During the Lesson (Procedure):

Instructional Input:

List your Instructional Strategies that you are using

1. Technology—virtual instruction by having students work follow along with me through the Prezi presentation online.
2. Whole class discussion throughout the Prezi to fill out worksheet as we go along with the Prezi.
3. Class lecture
Continue input-
    Students will participate in independent work, and class discussion throughout the Prezi and fill out the worksheet as we discuss the Prezi.

Modeling: (acknowledge any tech used here) and time it takes for this part of the lesson
I will model by demonstrating through different pictures projected through the Prezi and model the different storage devices and different sizes of capacity. (15 min—modeling throughout guided practice)
**Guided Practice** (don’t forget to use a variety of forms of student expression: media, speaking, writing, listening, role-playing, etc.) how much time?

Students will speak, listen, and write (type) during this time as they will participate in speaking with me and other classmates through discussion, listen to other classmates and myself, and write by filling out their worksheets. (15 minutes)

**Check for Understanding:** (Ask questions that force students to elaborate on information)

1. Teacher Observation (formative assessment)

I will ask questions that force students to elaborate on information by guiding their questions and allowing the appropriate wait time for student responses. I will give participation points based on participation in discussion and work time participation. I will also check to see that they know which storage devices are which and help them ways in which to remember capacity sizes by giving them and going over different acronyms like K,M,G (kid, mom, grandpa) for size order from smallest to largest.

**Independent Practice:** (activity that forces students to draw conclusions from their learning); how much time?
Their independent practice for this lesson will be during the time that they are individually filling out their worksheets as we are discussing the items on the worksheet throughout the Prezi. (10 minutes)

**Closure (summary):** preview-summarize-predict; and how much time will this take? Estimate time.
I will summarize what we went over during the lesson including the different storage devices and have students give me examples of each and go over the order of capacity sizes by asking students to tell me the order. (2-3 minutes)

**Follow-up activities:** (could be homework or other long range projects); estimated time
There were no follow-up activities for this lesson.
Label the images from the Prezi!

_________________________  ______________  __________
Label these data capacity measurements and give an example of each:

Kilobyte: _____  Example: _______________
Megabyte: _____  Example: _______________
Gigabyte: _____  Example: _______________

Prezi Presentation given in class via the internet over the projector:
Lesson Plan

**Teacher/School:** Emily Hoffman/ Maryville Middle School (5th grade)

**Title:** Think-Pair-Share Online flashcard review

**Time Allotted for Lesson:** 20 min (first 20 minutes of class are dedicated to the keyboarding portion of the class—Type to Learn program and typing warm-ups)

**Materials Needed:**
Internet, computer, projector/Document Camera
*Online flashcard review found on Mrs. Cline’s (cooperating teacher) website.

**Standards:**
1. Students will be able to recall if specific devices are input, output, or storage devices.

**Lesson Objective(s):**
1. The learner will determine if devices are input, output, or storage devices by the think-pair-share method with 95% accuracy.

**Modified objective:**
The learner will determine if devices are input, output, or storage devices by the think-pair-share method with 90% accuracy. (This learner will also be within close proximity to assist with the think-pair-

**Accommodations/Adaptations**

Materials that have been adapted/for whom?

Computer adaptations made for a student who has difficulty focusing and learns at a slower pace—commonly used web pages were “favorite” to make it more accessible to the student and the student sits close to the teacher station.

Who is this Modified Objective for?

The modified objective is for a student who has trouble focusing and learns at a slow pace.
Lesson Objective(s) Rationale: Why did you choose this/these objective(s) for your students?
1. I chose this objective for my students because it is important that they can differentiate between the three types of devices when dealing with computers—which students will do a lot of in this class and in the real world.
2. This objective is important for my students because it gives them the basic fundamentals of devices they will use when working with computers and other technology.
3. I chose this objective for my students because it helps them to think critically with the terms Input, Output, and Storage Devices and what those devices do to make them what they are.

Assessment: what will you do to know if the students have gotten the objective(s)? Connect these to your Instructional strategies.
Formative Assessment: I will observe student learning by having students share out with class during the “share” part of the think-pair-share activity.

Before the Lesson(anticipatory set):
May be an advanced organizer
There will not be an anticipatory set for this lesson since it is a review.
During the Lesson (Procedure):

**Instructional Input:**
List your Instructional Strategies that you are using

1. Technology—Flashcards online and online stopwatch to time the think-pair-share activity
2. Think-Pair-Share (Kagan strategy)—students will pair together and the class will be shown a flash card on the projected screen with an input, output, or storage device on the card. The pairs will have to first think about their answer, and then discuss whether they think the device is an input, output, or storage, and why, and then I will call on specific groups to share with the whole class.
3. Whole class discussion—There will be whole class discussion when there is a disagreement with an answer or when I feel like a specific device needs to be discussed.

**Modeling:** (acknowledge any tech used here) and time it takes for this part of the lesson
I will model how the think-pair-share activity will work by explaining each step to students. I will explain that they will be in pairs and the whole class will be given a flash card on the screen and that they are to determine with their partner whether that device on the flashcard is an input, output, or storage device and why. (2 minutes)

**Guided Practice** (don’t forget to use a variety of forms of student expression: media, speaking, writing, listening, role-playing, etc.) how much time?

---

How much time will this take?
15 minutes

Student Expression: Speaking and listening
Students will *speak* to one another during the time of the think-pair-share activity and listen to *one* another talk. They will also *speak* and *listen* to me and each other when we share out as an entire class when talking about the different devices.

**Check for Understanding:** *(Ask questions that force students to elaborate on information)*

1. Teacher Observation (formative assessment)
   I will check for understanding through my formative assessment when I observe students participating in think-pair-share and prompt them with leading questions when telling me what makes a device what it is.

**Independent Practice:** *(activity that forces students to draw*
conclusions from their learning); how much time?
There will not be an independent practice in this lesson as the think-pair-share activity will take up the entire 20 minutes of class time.

**Closure (summary):** preview-summarize-predict; and how much time will this take? Estimate time.
The closure of this activity will be quickly going over any important devices that were not covered during the class think-pair-share time as an entire class discussion and discussing why each device is what it is. (3 minutes)

**Follow-up activities:** (could be homework or other long range projects); estimated time
There will not be a follow-up activity for this lesson.
**Lesson Plan**

| **Teacher/School:** Emily Hoffman/ Maryville Middle School (5th grade)  | ** Modifications**  
| **Title:** Numbered Heads Together Power Point Review  | **Accommodations/Adaptations**  
| Time Allotted for Lesson: 20 min (first 20 minutes of class are dedicated to the keyboarding portion of the class—Type to Learn program and typing warm-ups)  | Materials that have been adapted/for whom?  
| **Materials Needed:** computer, projector/Document Camera, review Power Point  | Computer adaptations made for a student who has difficulty focusing and learns at a slower pace—commonly used web pages were “favorite” to make it more accessible to the student and the student sits close to the teacher station.  

**Standards:**

1. Students will review internal/external devices, input/output/storage devices, and other basic computer skills discussed in the unit.

**Lesson Objective(s):**

1. The learner will answer review questions from the Power Point with 95% accuracy.

**Modified objective:**

1. The learner will answer review questions from the Power Point with 90% accuracy.

**Who is this Modified Objective for?**

The modified objective is for a student who has trouble focusing and learns at a slow pace.
**Lesson Objective(s) Rationale:** Why did you choose this/these objective(s) for your students?

1. This objective is important for my students to have a review and study for the post test they will have to take over the unit.
2. I also chose this objective for my students because I think it is important for their brain and memory to go over information such as this more than a few times so that they will remember the information for a longer period of time.
3. This objective is important for students to work in teams and be able to collaborate and come up with answers with one another.

**Assessment:** What will you do to know if the students have gotten the objective(s)? Connect these to your Instructional strategies.

Formative assessment: I will be able to observe the classroom and different groups in the Numbered Heads Together review game and see what students understand the material and which ones are still struggling with it by how each student interacts with the group. I will group students based on my prior knowledge of this information.

**Before the Lesson (anticipatory set):**

*May be an advanced organizer*

Since I will only have 20 minutes to do this lesson, for the anticipatory set, I will explain how Numbered Heads Together will work, and put students in groups by strategically pairing them but making it look like to them that I was doing it at random.

<table>
<thead>
<tr>
<th>What accommodations have been made for special students assessments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will stand within close proximity of the student with special needs for this particular lesson to formatively assess her knowledge of the material.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How much time will this take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4 minutes)</td>
</tr>
</tbody>
</table>
**During the Lesson (Procedure):**

**Instructional Input:**
List your Instructional Strategies that you are using

1. Technology—I will use the PowerPoint review questions given through the computer and projected on the screen for the Numbered Heads Together review.

2. Numbered Heads Together (Kagan strategy)—Students will be given a question, collaborate with their group members and raise their hands once everyone in the group knows the answer (everyone must be raising their hand in the group). Each student in each group will be assigned a color, and I will call on colors at random to be the spokesperson and answer questions for the group.

**Modeling:** (acknowledge any tech used here) and time it takes for this part of the lesson

Modeling will take place during the anticipatory set or instructions part of the Numbered Heads Together where I will explain how the review game works. (3-4 minutes)

**Guided Practice** (don’t forget to use a variety of forms of student expression: media, speaking, writing, listening, role-playing, etc.) how much time?
Students will be using media, through the Power Point, speaking with their group members and out loud with the class, listening to their classmates, and role-playing as the spokesperson for their group. (15 minutes—will take place during the time of the Numbered Heads Together review)

**Check for Understanding:** (Ask questions that force students to elaborate on information)
1. Teacher Observation (formative assessment) during the review and asking students prompting questions to expand on their answers given during the review and further material to discuss with their groups.

**Independent Practice:** (activity that forces students to draw conclusions from their learning): how much time?
<table>
<thead>
<tr>
<th>There will not necessarily be an independent practice for this lesson because students will be in groups during their review.</th>
</tr>
</thead>
</table>
| **Closure (summary):** preview- summarize-predict; and how much time will this take? Estimate time.  
We will quickly go over anything we didn’t get to in the review game, as a whole class during the last 5 minutes of class to make sure students get a review of all information. I will do this by asking questions to the whole class and calling on specific students to answer one at a time. |
| **Follow-up activities:** (could be homework or other long range projects); estimated time  
The only follow-up activity would be for students to review or study material on their own if they felt like they needed to by studying with review games on the class website or studying the two worksheets completed during the unit. |
Lesson Plan

**Teacher/School:** Emily Hoffman/ Maryville Middle School (5th grade)

**Title:** Edmodo Post for Internal/External devices and Virtual Labeling of Input, Output, and Storage Devices

**Time Allotted for Lesson:** 20 min (first 20 minutes of class are dedicated to the keyboarding portion of the class—Type to Learn program and typing warm-ups)

**Materials Needed:**
Computer for each student, projector/Document Camera, Edmodo

**Standards:**
1. Students will be able to label input, output, and storage devices through a Venn Diagram on the computer.
2. Students will be able to tell the difference between internal and external devices and describe why they are input or output devices.

**Lesson Objective(s):**
1. The learner will label input, output, and storage devices on a virtual diagram on the computer with 95% accuracy (diagram attached to bottom of this lesson plan).
2. The learner will respond electronically to a question posted on the class web site on Edmodo with 90% accuracy (Edmodo question post attached to the bottom of this lesson plan).

**Modifications**

**Accommodations/Adaptations**

Materials that have been adapted/for whom?
Computer adaptations made for a student who has difficulty focusing and learns at a slower pace—commonly used web pages were “favorite” to make it more accessible to the student and the student sits close to the teacher station.
**Modified objective:**

1. The learner will label input, output, and storage devices on a printed out version of the Venn diagram from the computer with 95% accuracy (diagram attached to bottom of this lesson plan).
2. The learner will respond electronically to a question posted on the class web site on Edmodo with 85% accuracy (Edmodo question post attached to the bottom of this lesson plan).

**Lesson Objective(s) Rationale:** *Why did you choose this/these objective(s) for your students?*

1. I chose this objective for my students to prepare them for what they will need to know in the future when dealing with computers and technology devices.
2. I chose this objective for my students to prepare them for the rest of this class for what pieces of technology they will use later in the class.
3. I chose this objective to help prepare students for the real world and because technology is always advancing and improving, so it is important for them to understand the basics.

**Assessment:** *What will you do to know if the students have gotten the objective(s)? Connect these to your Instructional strategies.*

A formative assessment will be used to check student work on their

**Who is this Modified Objective for?**

The modified objective is for a student who has trouble focusing and learns at a slow pace.
responses to the Edmodo post and their accuracy on the virtual labeling will be graded and recorded as well.

**Before the Lesson (anticipatory set):**
*May be an advanced organizer*

The post on Edmodo will be the anticipatory set for this lesson because it is something to get their mind going and respond to a question that will lead into the activity they will be doing.

**During the Lesson (Procedure):**

*Instructional Input:*

List your Instructional Strategies that you are using

1. Technology—Edmodo post and virtual labeling of input, output, and storage devices.
2. Lecture when telling students to log in and make the post on Edmodo and when telling them to do the virtual labeling assignment on the computer.
3. Not a lot of instruction will be given during this lesson, as students will be working on their own to show me what they know during the lesson.

Continue input-

*Modeling: (acknowledge any tech used here) and time it takes for this part of the lesson*

I will show students how to access the virtual labeling the Venn

What accommodations have been made for special students assessments?

No accommodations will be made for the special needs student for this particular assessment other than assisting her when needed (other than her labeling will not be graded virtually—it will be graded on paper).

How much time will this take?

(about 8 minutes)
Diagram assignment by showing them through the document camera/projector. (3 minutes)

**Guided Practice** (don’t forget to use a variety of forms of student expression: media, speaking, writing, listening, role-playing, etc.) how much time?

Students will be writing from typing on Edmodo, and use media from using the classroom website to complete the virtual labeling assignment. (8 minutes)

**Check for Understanding:** (Ask questions that force students to elaborate on information)

1. Teacher Observation (formative assessment) of the posted response on Edmodo and students will be graded on their accuracy on the virtual labeling assignment.

**Independent Practice:** (activity that forces students to draw conclusions from their learning); how much time?

Goes along with guided practice. It is more of an independent practice, but I will be acting as a “sage on the stage” or coach as well during their independent working time (guided)-- Students will be writing from typing on Edmodo, and use media from using the classroom website to complete the virtual labeling assignment. (8 minutes)
Closure (summary): preview- summarize-predict; and how much time will this take? Estimate time.
1-2 minutes taken to go over a few responses put as answers on the Edmodo post by having a few students share at the end of class as a quick review and for me to clear up any misconceptions.

Follow-up activities: (could be homework or other long range projects); estimated time

There will not be any follow-up activities for this lesson.
Me to 12-13 Keyboarding 1

Internal/External

Turned in (17) DUE: Jan 23, 2013

Name one INTERNAL computer device and one EXTERNAL computer device. Then tell me if the EXTERNAL device is an input or an output device and why. Please use complete sentences.
Types of Computer Devices

Input
- Keyboard
- Microphone
- Scanner
- Mouse

Output
- Head phones
- Head set
- Digital camera
- Flash Drive
- CD/DVD
- Laser printer
- Inkjet printer
- Monitor
- Speakers

Storage
- Hard Drive
One instance for which modifications had to be made during the lesson in my fifth grade key boarding class was when students were doing a virtual computer assignment in which they had to virtually place devices (input, output, and storage devices) in a Venn Diagram. There was a technology malfunction, and I was unable to grade six students work because their program was not working on their computer. To modify, I had each of those six students show and tell me where they would place each device on the Venn Diagram and then I marked their grade on a checklist sheet with their name. Even though these six students were not able to complete the assignment as originally planned, I was still able to assess their knowledge on the material, and they were still able to see the assignment with the technology even though it was not working properly. This modification only affected these six students, and the rest of the class was able to go on with the lesson as originally planned.

A second instance for when an unexpected modification had to be made during a lesson was when we were doing a Kagan Cooperative Learning activity for a review—Numbered Heads Together, and each group of students all missed two of the review questions during the game. Since we were reviewing for the upcoming post-test, I decided that this material needed to be re-taught before moving on with the review game. So, I took about 5 minutes to re-teach the material on capacity—Kilobyte, Megabyte, and Gigabyte, and gave the students an acronym to remember the three and the order they go in from smallest to largest (KB, MB, GB—
I truly believe that this modification helped improve student knowledge on the subject and performance on the post-test. This modification affected the entire class, not just a few students.

*Teacher candidate lesson reflection sheet and cooperating teacher reflection sheet attached at bottom
Lesson Reflection Sheet  
Teacher Candidate

This Reflection Sheet should be completed by the Teacher Candidate following lessons taught in the Teacher Work Sample (TWS) sequence. After teaching the lesson, meet with your cooperating teacher and discuss your own reactions to the following items. A signed copy of this item should be included (along with a copy of your cooperating teacher’s reflections) with your TWS documents.

Teacher Candidate:  
Name: Emily Hoffman  
Converting Teacher:  
Name: Cari Cline

School: Maryville Middle School  
Grade: 5th Grade  
Subject: Computers (Keyboarding)  
Date: Jan. 14, 2013

1. As a reflection on the lesson, in what ways were the students productively engaged in the work? How do I know?

   Students were somewhat productively engaged in the work. I know this because they were participating in class activity and discussions, but some students had to be redirected.

2. Did the lesson allow for students to engage in activities and learning situations which were consistent with the lesson plan and district curriculum because students were able to set goals and decide how to achieve them or track progress in the class?

   Yes, the lesson allowed for students to engage in activities and learning situations which were consistent with the lesson plan and district curriculum because students were able to set goals and decide how to achieve them or track progress in the class.

3. What feedback did I receive from students indicating they achieved understanding and that the goals/objectives were met for this lesson?

   Students indicated that they achieved understanding by following directions and asking questions. The objectives were met for the lesson because students were on task and doing what they were instructed to do.

4. Did I adjust my goals or my work as I taught the lesson? Why? How?

   Yes, I adjusted my goals and work as I taught the lesson because I had to use time not planned in the lesson plan to aid students in creating a short cut to access their typing program. Type to Learn 3. This was necessary for students to continue with the lesson.

5. If I had the opportunity to teach this lesson again to this same group of students, what would I do differently?

   If I had the opportunity to teach this lesson again to this same group of students, I would adjust my goals and work as I taught the lesson because I had to use time not planned in the lesson plan to aid students in creating a short cut to access their typing program. Type to Learn 3. This was necessary for students to continue with the lesson.
This Reflection Sheet must be completed by the cooperating teacher following an observation of a lesson taught in the Teacher Work Sample (TWS) sequence. Please meet with your teacher candidate post-observation to discuss/compare reactions to the following items. A signed copy of this form should be included with the TWS documents.

Lesson Reflection

Teacher Candidate:  
Emily Hoffman
Maryville R-4i Middle School
5th grade
01/14/2013

1. As you observed this lesson, to what extent were students productively engaged in the work?

Students were somewhat engaged throughout the lesson. The students that were off-task and distracted she dealt with those by asking another student for the information that was already provided.

Yes, the lesson provided students with the opportunity to set goals, map out how they would be achieved, and setup a method to track progress to improve their technology skills.

The teacher was able to utilize other students to help those that did not understand by having them help answer the question.

Yes, she needed to take time to aid students in creating a shortcut to access Type to Learn 3. This helped the students to access the required software. Without assistance, students would not have been able to access it.

She needs to relax a little bit. On occasion, when she is trying to figure out what to say, I can hear a shakiness or strain in her voice. Also, she needs to work on projecting her voice more.
### Pre/Post Data for Questions on 5th Grade Computer Basics Pre and Post Test in a Keyboarding One Class

<table>
<thead>
<tr>
<th>Name</th>
<th>Grade</th>
<th>Gender</th>
<th>Accom</th>
<th>Pre-Test</th>
<th>Post-Test</th>
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<td>Q1</td>
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<td>Q3</td>
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<tr>
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Graphs are included on the following four sheets at the bottom of this Excel workbook and narratives to analyze the graphs are included. As students move on to their next unit of content which is a unit on Microsoft Word, they will need continued improvement on these objectives, as well as the other measured objectives in the unit in order to keep moving on to further units and advanced topics with computers. This unit was the basic information and building blocks of all computer applications and software applications and will be very beneficial in helping students to be successful in those advanced topics.

***1's and 0's above:
1- question answered correctly
0- question answered incorrectly***
An effective classroom management plan is a key factor to a successful classroom, and I felt that I had that in my student teaching experience in the 5th grade computers classroom at Maryville Middle School. Students were on task, aware of the rules of the classroom, and followed directions when given. Of course, a few changes had to be made and I had to implement new ideas such as some of the Kagan strategies for redirection and gaining class attention. Some of these strategies I used were, "Snap once if you can hear me, snap twice if you can hear me, and snap three times if you can hear me." I also used the "Give me 10" strategy which was successful for me teaching in a computers classroom. The “Give me 10” strategy requires students to put both hands in the air and face the teacher wherever she is in the classroom. This frees all hands and eyes from computer screens, the mouse, and keyboards.

There also had to be a few changes with things in the classroom management plan such as the seating arrangement and having to move a few students individually due to behavior problems. I also implemented an individualized behavior plan for a student who had difficult not being a distraction to the class and staying on task. This individualized plan gave him a better opportunity to be successful and gave the rest of the class a better opportunity to be successful. This particular student’s individualized plan included an isolated seat from the rest of the class, but within close proximity of a few students. He was also given 3 chances each week to earn the chair with wheels like the rest of the class had, but he had to earn that chair each week
because there were too many times where he showed that he could not handle having a chair with wheels. This helped him having a goal to strive toward and to be on his best behavior so that he could get that chair during the week.

In the future, I plan to change my classroom management plan by implementing those Kagan strategies more early on, so that the students get used to the classroom routine more quickly. I feel that this will help the students to be more aware of what I expect from them as the teacher, and to help them be successful in the class.

My student teaching experience made me realize how important collegiate and collaborative activities within the school setting are. Some collegiate activities I was involved in within the school setting were the after school “STAT” program in which students got extra help with homework from teachers after school, an FBLA (Future Business Leaders of America) meeting and FBLA week for the middle school. FBLA is a club/organization for 7th and 8th graders at MMS in which they participate in contests and a conference during the school year. FBLA and other organizations and activities in the school setting such as Student Council and sports are good for students to be involved in to help them be well-rounded individuals and work on responsibility and to find their interests. It was a great experience for me to see how my cooperating teacher got involved with the organization—being the leader/advisor—and to see how involved the students get and how much they put into it.

Collaborative activities within the school setting in which I was involved in were a staff development day, parent-teacher conferences, exploratory team meetings every Tuesday and Thursday, and after school meetings with my cooperating teacher
usually on a daily basis. Collaboration is so important to keep the lines of communication going so that everyone involved is on the same page and aware of what is going on to help achieve the ultimate goal of students being successful in learning. The staff development day was beneficial for me as a student teacher because I had the opportunity to interact with the entire school staff without students and to talk about things that aren’t discussed during a normal school day. We went over curriculum guidelines, Common Core Standards, how to better the school/staff as a whole, and more. Parent-teacher conferences were a great experience for me as a student teacher to see how those are run and to learn how to be successful when conducting those. Each parent/student situation was different, so I felt like I learned a lot from each conference.

Student teaching in a computers/keyboarding classroom, my cooperating teacher’s “team” was not with a specific grade level, her “team” is with the other exploratory classroom teachers such as music, P.E., art, discovery, family and consumer sciences, and band. These meetings were beneficial because all of these teachers are the only teachers in the school who have just about every student in the entire school (with the few exceptions of special needs students) at some point during the school year, so it is important to meet and collaborate to discuss certain students and behaviors. Lastly, I think the most important collaboration was between me and my cooperating teacher. We had a great relationship and great communication throughout my entire eight week student teaching experience. It helped to discuss strategies, students, classroom management, and just get to know each other to form a bond and be successful in the classroom! All of these things I learned in my experience and can apply to my future in my own classroom and school setting one day.
For my overall self-improvement plan, I know that I have specific areas of strength that I want to continue, and I have specific areas in which I would like to improve on. Some of my strengths are my connections I make with students and how I relate to them, my classroom management and respect I have of my students, and how I help my students in any way I can to help each and every one of them be successful. My goal is focusing on helping students learn and discover learning and be successful rather than just teaching and I feel that is one of my greatest strengths. I learned that I want to shape my students and be a positive influence on their lives, because for some students, my classroom or school might be the only positive thing about their day, so I want it to be the best it can be for them.

Specific areas that I would like to improve on for my own self-improvement plan and tried changing and applying during my student teaching experience are increasing the volume in my voice when trying to get the attention of my class, and have more confidence and poise in my voice when teaching. I would also like to improve on differentiating lessons and constantly looking for new and improving ideas to gain student interest and attention for learning. I feel like there will always be things to improve on while teaching, no matter how long you have been teaching, and being aware of that itself is something I, and all teachers can improve on—frequent self-reflection.